Title (en)

LEARNING METHOD AND LEARNING DEVICE FOR ADJUSTING PARAMETERS OF CNN BY USING LOSS AUGMENTATION AND TESTING METHOD AND TESTING DEVICE USING THE SAME

Title (de)

LERNVERFAHREN UND LERNVORRICHTUNG ZUM EINSTELLEN DER PARAMETER VON CNN UNTER VERWENDUNG VON VERLUSTVERSTÄRKUNG UND TESTVERFAHREN UND TESTVORRICHTUNG UNTER VERWENDUNG DERSELBEN

Title (fr)

PROCÉDÉ D'APPRENTISSAGE ET DISPOSITIF D'APPRENTISSAGE POUR AJUSTER LES PARAMÈTRES DE CNN GRÂCE À L'AUGMENTATION DE PERTE ET PROCÉDÉ DE TEST ET DISPOSITIF DE TEST LES UTILISANT

Publication

EP 3477554 A3 20190605 (EN)

Application

EP 18192822 A 20180905

Priority

US 201715783481 A 20171013

Abstract (en)

A learning method for adjusting parameters of a CNN using loss augmentation is provided. The method includes steps of: a learning device acquiring (a) a feature map from a training image; (b) (i) proposal ROIs corresponding to an object using an RPN, and a first pooled feature map by pooling areas, on the feature map, corresponding to the proposal ROIs, and (ii) a GT ROI, on the training image, corresponding to the object, and a second pooled feature map by pooling an area, on the feature map, corresponding to the GT ROI; and (c) (i) information on pixel data of a first bounding box when the first and second pooled feature maps are inputted into an FC layer, (ii) comparative data between the information on the pixel data of the first bounding box and a GT bounding box, and backpropagating information on the comparative data to adjust the parameters.

IPC 8 full level

G06N 3/04 (2006.01); **G06N 3/08** (2006.01); **G06V 10/22** (2022.01); **G06V 10/764** (2022.01); **G06V 20/00** (2022.01)

CPC (source: CN EP KR US)

G06F 18/214 (2023.01 - US); **G06F 18/24** (2023.01 - CN); **G06F 18/24143** (2023.01 - US); **G06N 3/04** (2013.01 - KR US); **G06N 3/045** (2023.01 - CN EP US); **G06N 3/08** (2013.01 - KR); **G06N 3/084** (2013.01 - CN EP US); **G06V 10/22** (2022.01 - EP US); **G06V 10/25** (2022.01 - CN); **G06V 10/454** (2022.01 - EP US); **G06V 10/764** (2022.01 - EP US); **G06V 10/82** (2022.01 - EP US); **G06V 20/00** (2022.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 10169679 B1 20190101; CN 109670573 A 20190423; CN 109670573 B 20230728; EP 3477554 A2 20190501; EP 3477554 A3 20190605; EP 3477554 B1 20240306; EP 3477554 C0 20240306; JP 2019075117 A 20190516; JP 6716662 B2 20200701; KR 102229328 B1 20210319; KR 20190041925 A 20190423

DOCDB simple family (application)

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